“

Use generative AI to recommend social places (restaurants bars, etc.) based on the user profile, locations, posts, search histories.

Group 21
Soham Kamble (A20517098)
Shivdeep Bisurkar(A20525712)
Karan Batra(A20518491)

Content:

- Project Overview
- Feature List
- Requirements
- Tools
- Use Cases
- Use Case Diagram
- Activity Diagrams

Project Overview

Introduction:

The project aims to develop an AI-powered recommendation system for social places such as restaurants, bars, cafes, etc. The system will leverage generative AI techniques to analyze user profiles, locations, posts, and search histories to provide personalized recommendations.

Objectives:

- Integrate OpenAI model to give recommendations based on user profiles, locations, posts, and search histories.
- Create a database of users with preferences stored as attributes.
- Use Yelp API to get places based on user preferences.
- Design a user-friendly interface for users to interact with the recommendation system.

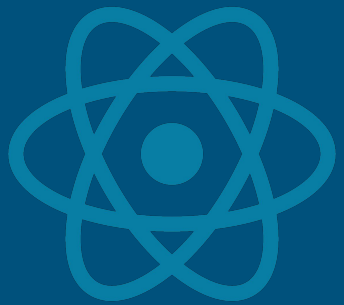
Feature List

- User Profile Management
- Data Integration
- Search Functionality
- Geospatial Search
- Dashboard and Visualization
- Recommendation Engine
- User Interaction
- Accessibility and Usability
- Performance and Scalability
- Data Privacy and Security
- Feedback and Improvement

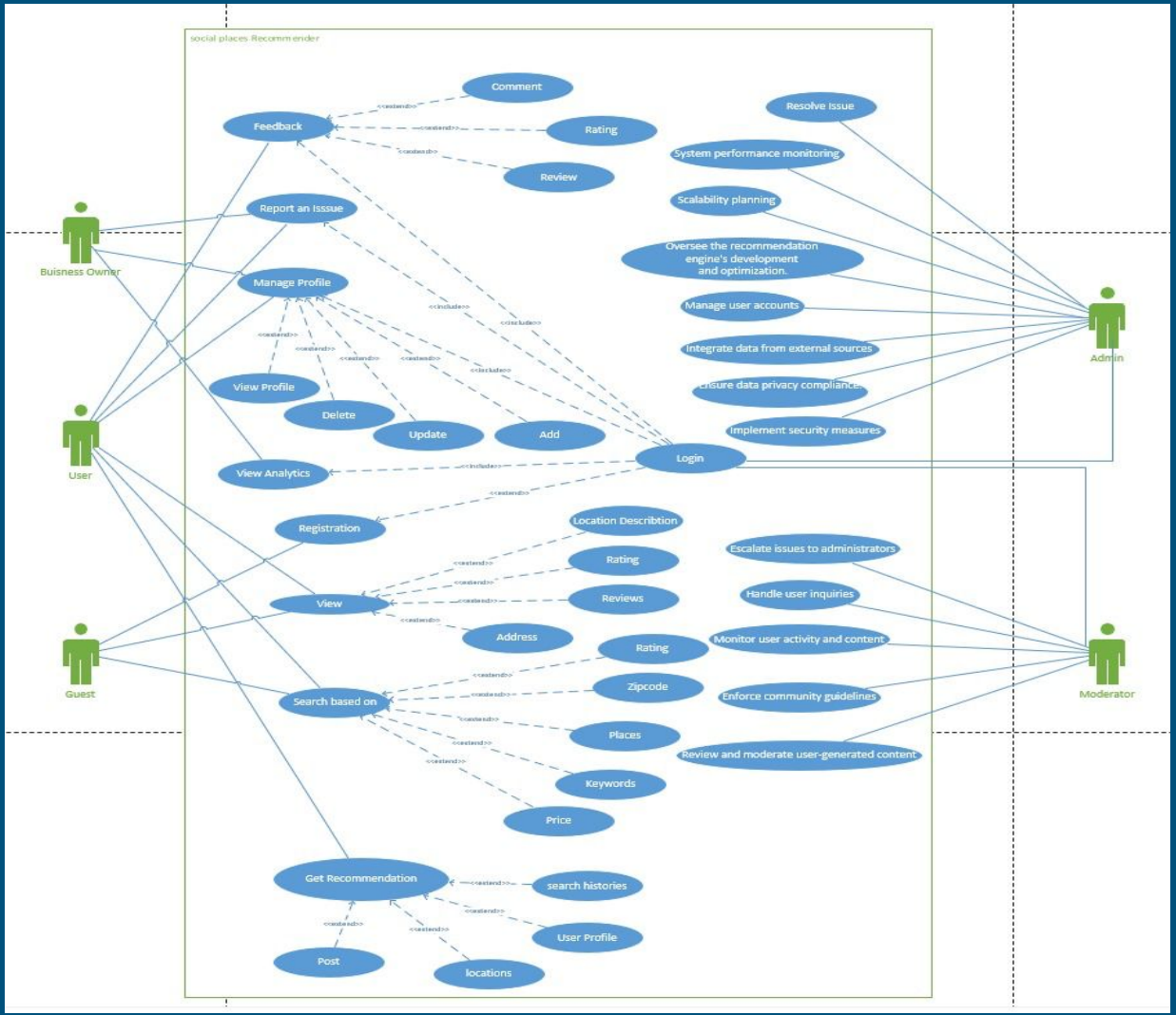
Requirements

- Simple Search and Dashboard
- Geospatial Search and Dashboard
- Heatmaps for Review Counts and Ratings
- User Profile Management
- Data Integration and Data Privacy
- Recommendation Engine
- User Interaction and Feedback
- Accessibility and Usability
- Performance and Scalability

Tools



Use Case Diagram



Use Cases

User

- Perform keyword searches for restaurants, bars, events, etc.
- Filter search results based on preferences like cuisine type, price range, and rating.
- Explore top-rated places and events through visualizations on the dashboard.
- Interact with the dashboard to delve deeper into search results.
- Use geospatial search to find nearby places within a specific zip code or radius.
- View search results on a map and filter them based on location.
- Explore review counts and ratings per zip code through visualizations on the dashboard.
- Create and manage their profiles, specifying preferences such as cuisine type and dietary restrictions.
- Provide feedback on recommendations and leave reviews, ratings, and comments for visited places.

Use Cases

Business Owner

- Manage their business profiles on the platform, including updating information and responding to user reviews and comments.
- Access analytics and insights on their business performance.
- Collaborate with administrators to resolve any issues related to their listings.

Moderator

- Monitor user activity and content on the platform.
- Review and moderate user-generated content such as reviews, ratings, and comments.
- Ensure compliance with platform guidelines and policies.
- Handle user inquiries and escalate issues to administrators if necessary.

Use Cases

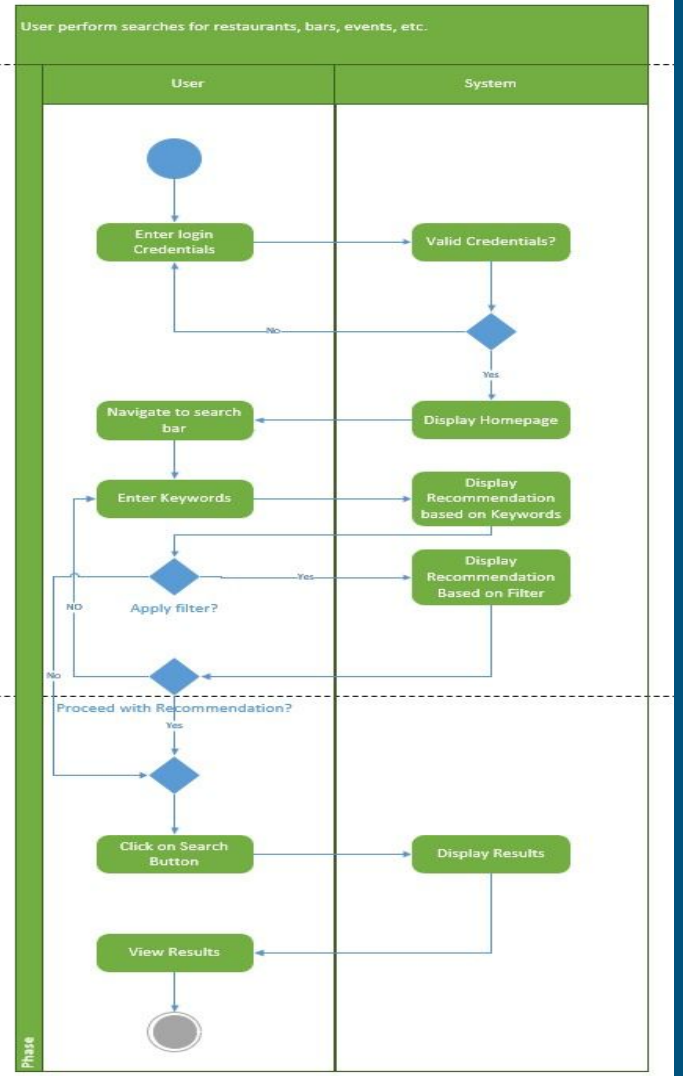
Admin

- Manage user accounts, including registration, authentication, and permissions.
- Integrate data from external sources such as Yelp API
- Ensure data privacy compliance.
- Implement security measures to protect user data and prevent unauthorized access.
- Oversee the recommendation engine's development and optimization.
- Handle system performance monitoring and scalability planning.

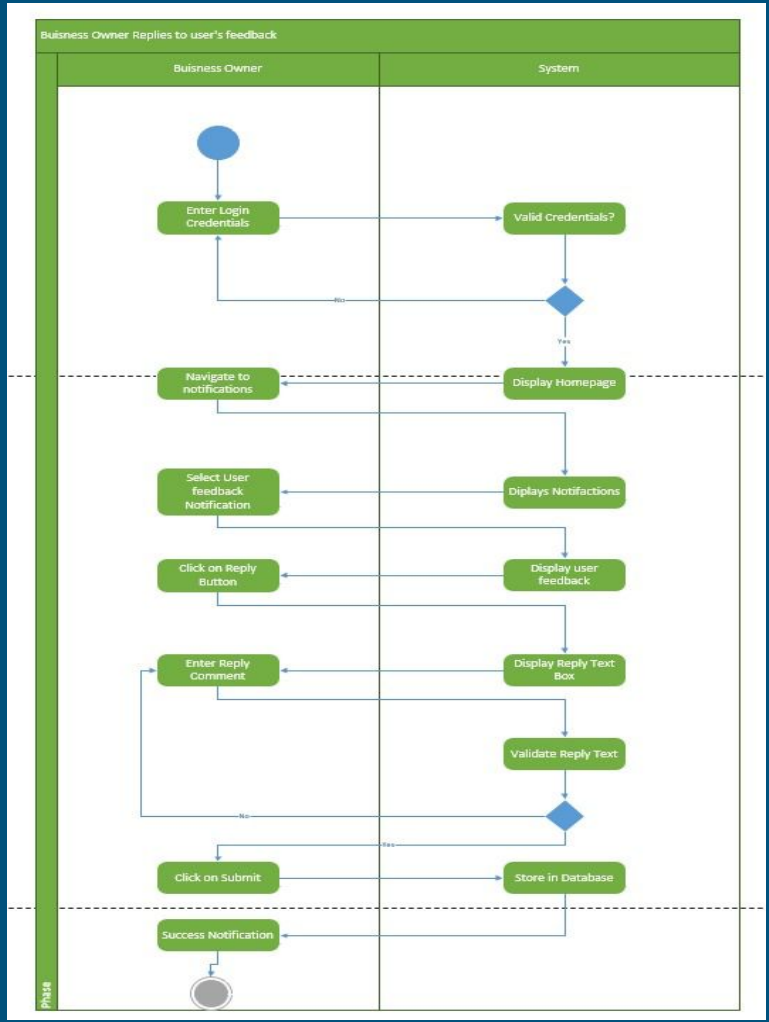
Guest

- Browse through the platform's content without registering or logging in.
- Perform simple searches for places, events, etc.
- View basic information about businesses and events.
- Access public feedback and reviews without the ability to leave comments or ratings.
- View search results on a map and filter them based on location.

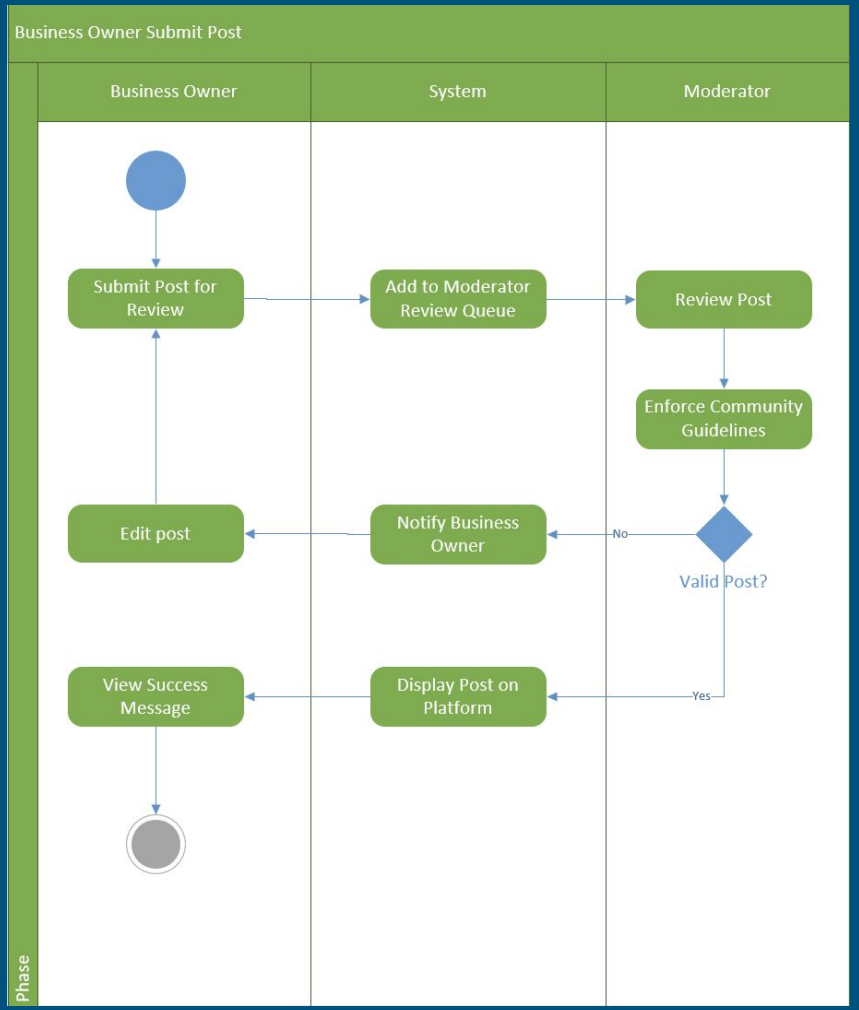
Activity Diagram 1: User Performs Search



Activity Diagram 2: Business Owner Reply



Activity Diagram 3: Business Owner Submit post



Thank you